



## Gabrielle Wong-Parodi

Assistant Professor of Earth System Science and Center Fellow at the Woods Institute for the Environment

 Curriculum Vitae available Online

---

### Bio

#### BIO

GABRIELLE WONG-PARODI is an Assistant Professor in the Department of Earth System Science and Center Fellow at the Woods Institute for the Environment at Stanford University. Her research focuses on applying behavioral decision research methods to address challenges associated with global environmental change. Dr. Wong-Parodi uses behavioral decision science approaches to create evidence-based strategies for informed decision making, with a particular focus on building resilience and promoting sustainability in the face of a changing climate. She has a background in energy resources, climate change adaptation and mitigation, and risk perceptions of emerging technologies, such as unconventional shale gas development. She was an invited speaker at the Sackler Colloquia at the National Academy of Sciences on the Science of Science Communication. She recently served on the National Academy of Sciences committee titled "Long-term Coastal Zone Dynamics: Interactions and Feedbacks between Natural and Human Processes and their Implications for the U.S. Coastline." Dr. Wong-Parodi is a faculty affiliate at Lawrence Berkeley National Laboratory and is the social science research liaison for the Climate Advocacy Lab. Dr. Wong-Parodi received her B.S. in Psychology at the University of California Berkeley, and her M.A. and Ph.D. in Risk Perceptions and Communication from the University of California, Berkeley.

#### ACADEMIC APPOINTMENTS

- Assistant Professor, Earth System Science
- Center Fellow, Stanford Woods Institute for the Environment

#### PROFESSIONAL EDUCATION

- PhD, University of California, Berkeley , Social and Behavioral Sciences (Energy and Resources Group) (2011)
- MA, University of California, Berkeley , Social and Behavioral Sciences (Energy and Resources Group) (2007)
- BA, University of California, Berkeley , Psychology (2003)

---

### Research & Scholarship

#### CURRENT RESEARCH AND SCHOLARLY INTERESTS

My research uses a decision science approach for informing the development of behaviorally realistic policies and strategies for meeting the challenge of global environmental change. I am primarily interested in understanding and enhancing adaptive responses to this change given the rich context of people's lives in order to promote long-term resiliency and sustainability. The approach draws from the social and behavioral sciences and involves three interrelated activities: formal analysis, characterizing the choices a fully informed actor would take; descriptive research, examining how people actually behave in those circumstances; and interventions, designed to create viable, effective options and help decision makers choose among them. Each activity requires substantive collaboration with experts (e.g., climatologists, geologists, engineers, hydrologists, regulatory analysts) and continuing engagement with decision makers. A decision science approach is flexible enough to allow me to (1) translate model outputs into useful and actionable terms (e.g., decision aid that translates climate model outputs into terms decision makers

can understand and use), (2) integrate social/behavioral science into terms that can be used and integrated into models (e.g., identify realistic weighting for Bayesian Belief Network (BBN) on carbon capture and storage (CCS) development), and (3) use diverse tools to gather and analyze data (e.g., machine learning techniques to analyze utility documents to predict the impact of climate policies on decision making). I have used this approach to work on a diverse set of decisions regarding the risks of global environmental change (e.g. sea-level rise, natural disasters, infectious diseases, etc.) and possible solutions (e.g., carbon capture and storage, energy efficiency, autonomous vehicles, etc.).

Current projects include: investigating behavioral responses to hurricanes and sea-level rise; developing and testing decision support tools to enhance adaptive capacity and health outcomes; investigating awareness of and behavioral responses to wildfire smoke and informational campaigns; investigating behavioral drivers of the adoption and use of emerging transportation services and technologies.

## Teaching

---

### COURSES

#### 2020-21

- Decision Science for Environmental Threats: EARTHSYS 227, ESS 227 (Aut)
- Shaping the Future of the Bay Area: CEE 118X (Aut)
- Shaping the Future of the Bay Area: CEE 118Y (Win)
- Shaping the Future of the Bay Area: CEE 218X (Aut)
- Shaping the Future of the Bay Area: CEE 218Y (Win)
- Shaping the Future of the Bay Area: ESS 118X (Aut)
- Shaping the Future of the Bay Area: ESS 118Y (Win)
- Shaping the Future of the Bay Area: ESS 218X (Aut)
- Shaping the Future of the Bay Area: ESS 218Y (Win)
- Shaping the Future of the Bay Area: GEOLSCI 118X, GEOLSCI 218X, GEOPHYS 118X (Aut)
- Shaping the Future of the Bay Area: GEOPHYS 118Y (Win)
- Shaping the Future of the Bay Area: GEOPHYS 218X (Aut)
- Shaping the Future of the Bay Area: GEOPHYS 218Y (Win)
- Shaping the Future of the Bay Area: PUBLPOL 118X (Aut)
- Shaping the Future of the Bay Area: PUBLPOL 118Y (Win)
- Shaping the Future of the Bay Area: PUBLPOL 218X (Aut)
- Shaping the Future of the Bay Area: PUBLPOL 218Y (Win)

#### 2019-20

- Decision Science for Environmental Threats: EARTHSYS 227, ESS 227 (Aut)
- Hard Earth: Environmental Justice: CEE 126X, EARTH 126X (Aut)
- Hard Earth: Stanford Graduate-Student Talks Exploring Tough Environmental Dilemmas: CEE 126Y, EARTH 126Y (Win)
- Hard Earth: The Interconnected Impacts of Global Climate Change: CEE 126Z, EARTH 126Z (Spr)
- Shaping the Future of the Bay Area: CEE 118Y, CEE 218Y, GEOPHYS 118Y, GEOPHYS 218Y (Win)

### STANFORD ADVISEES

#### Doctoral Dissertation Reader (AC)

Randall Holmes

**Postdoctoral Faculty Sponsor**

Natalie Herbert

**Doctoral Dissertation Co-Advisor (AC)**

Bianca Santos

**Publications**

---

**PUBLICATIONS**

- **When climate change adaptation becomes a "looming threat" to society: Exploring views and responses to California wildfires and public safety power shutoffs** *ENERGY RESEARCH & SOCIAL SCIENCE*  
Wong-Parodi, G.  
2020; 70
- **Governing energy in conflicted resource contexts: Culture, cost, and carbon in the decision-making criteria of the Navajo Nation** *ENERGY RESEARCH & SOCIAL SCIENCE*  
Necefer, L., Wong-Parodi, G., Small, M. J.  
2020; 70
- **Responding to simultaneous crises: communications and social norms of mask behavior during wildfires and COVID-19** *ENVIRONMENTAL RESEARCH LETTERS*  
Santana, F. N., Fischer, S. L., Jaeger, M. O., Wong-Parodi, G.  
2020; 15 (11)
- **Do We Know Our Own Tornado Season? A Psychological Investigation of Perceived Tornado Likelihood in the Southeast United States** *WEATHER CLIMATE AND SOCIETY*  
Broomell, S. B., Wong-Parodi, G., Morss, R. E., Demuth, J. L.  
2020; 12 (4): 771–88
- **Change in Public Concern and Responsive Behaviors Toward Air Pollution Under the Dome** *RISK ANALYSIS*  
Qin, C., Xu, J., Wong-Parodi, G., Xue, L.  
2020; 40 (10): 1983–2001
- **Children, Income, and the Impact of Home Delivery on Household Shopping Trips** *TRANSPORTATION RESEARCH RECORD*  
Spurlock, C., Todd-Blick, A., Wong-Parodi, G., Walker, V.  
2020
- **Factors associated with the adoption of renewable energy amongst botanical garden members** *ENVIRONMENTAL RESEARCH COMMUNICATIONS*  
Drummond, C., States, S. L., Wong-Parodi, G.  
2020; 2 (5)
- **Scientific forecast use and factors of influence in water-constrained contexts: The case of Guanacaste, Costa Rica** *CLIMATE SERVICES*  
Wong-Parodi, G., Babcock, M.  
2020; 18
- **Not under my backyard? Psychological distance, local acceptance, and shale gas development in China** *ENERGY RESEARCH & SOCIAL SCIENCE*  
Tan, H., Wong-Parodi, G., Xu, J.  
2020; 61
- **Editorial overview: The science of actionable knowledge** *CURRENT OPINION IN ENVIRONMENTAL SUSTAINABILITY*  
Arnott, J. C., Mach, K. J., Wong-Parodi, G.  
2020; 42: A1–A5
- **Different preferences for recovery options of residential fire disasters: The effect of decision role and stressed emotion** *INTERNATIONAL JOURNAL OF DISASTER RISK REDUCTION*  
Qin, C., Wong-Parodi, G., Fan, B.  
2020; 43

- **Insights for developing effective decision support tools for environmental sustainability** *CURRENT OPINION IN ENVIRONMENTAL SUSTAINABILITY*  
Wong-Parodi, G., Mach, K. J., Jagannathan, K., Sjostrom, K.  
2020; 42: 52–59
- **Understanding and countering the motivated roots of climate change denial** *Current Opinion in Environmental Sustainability*  
Wong-Parodi, G., Feygina, I.  
2020
- **Actionable knowledge and the art of engagement** *CURRENT OPINION IN ENVIRONMENTAL SUSTAINABILITY*  
Mach, K. J., Lemos, M. C., Meadows, A. M., Wyborn, C., Klenk, N., Arnott, J. C., Ardoin, N. M., Fiesler, C., Moss, R. H., Nichols, L., Stults, M., Vaughn, C., Wong-Parodi, et al  
2020; 42: 30-37
- **The politics of Asian fracking: Public risk perceptions towards shale gas development in China** *ENERGY RESEARCH & SOCIAL SCIENCE*  
Tan, H., Xu, J., Wong-Parodi, G.  
2019; 54: 46–55
- **Encouraging energy conservation at work: A field study testing social norm feedback and awareness of monitoring** *ENERGY POLICY*  
Wong-Parodi, G., Krishnamurti, T., Gluck, J., Agarwal, Y.  
2019; 130: 197–205
- **Describing the users: Understanding adoption of and interest in shared, electrified, and automated transportation in the San Francisco Bay Area** *TRANSPORTATION RESEARCH PART D-TRANSPORT AND ENVIRONMENT*  
Spurlock, C., Sears, J., Wong-Parodi, G., Walker, V., Jin, L., Taylor, M., Duvall, A., Gopal, A., Todd, A.  
2019; 71: 283–301
- **Generating linked technology-socioeconomic scenarios for emerging energy transitions** *APPLIED ENERGY*  
Small, M. J., Wong-Parodi, G., Kefford, B. M., Stringer, M., Schmeda-Lopez, D. R., Greig, C., Ballinger, B., Wilson, S., Smart, S.  
2019; 239: 1402–23
- **Solar PV as a mitigation strategy for the US education sector** *ENVIRONMENTAL RESEARCH LETTERS*  
Hanus, N. L., Wong-Parodi, G., Vaishnav, P. T., Darghouth, N. R., Azevedo, I. L.  
2019; 14 (4)
- **How to reach the users: Understanding use and interest in shared, alternative-fuel, and automated transportation in the San Francisco Bay Area** *Transportation Research Part D: Transport and Environment*  
Spurlock, C., Spears, J., Wong-Parodi, G., Walker, V., Jin, L., Taylor, M., Duvall, A., Gopal, A., Todd, A.  
2019
- **A Decision-Centered Method to Evaluate Natural Hazards Decision Aids by Interdisciplinary Research Teams.** *Risk analysis : an official publication of the Society for Risk Analysis*  
Wong-Parodi, G., Small, M. J.  
2019
- **Neither a borrower nor a lender be: Beyond cost in energy efficiency decision-making among office buildings in the United States** *ENERGY RESEARCH & SOCIAL SCIENCE*  
Davis, A., Wong-Parodi, G., Krishnamurti, T.  
2019; 47: 37–45
- **The politics of Asian fracking: Public risk perceptions towards shale gas development in China** *Energy Research & Social Science*  
Tan, H., Xu, J., Wong-Parodi, G.  
2019
- **To co-produce or not to co-produce** *NATURE SUSTAINABILITY*  
Lemos, M., Arnott, J. C., Ardoin, N. M., Baja, K., Bednarek, A. T., Dewulf, A., Fieseler, C., Goodrich, K. A., Jagannathan, K., Klenk, N., Mach, K. J., Meadow, A. M., Meyer, et al  
2018; 1 (12): 722–24
- **Integrating technical, economic and cultural impacts in a decision support tool for energy resource management in the Navajo Nation** *ENERGY STRATEGY REVIEWS*  
Necfefer, L., Wong-Parodi, G., Small, M. J., Begay-Campbell, S.

2018; 22: 136–46

- **Factors Influencing (Mal)adaptive Responses to Natural Disasters: The Case of Hurricane Matthew** *WEATHER CLIMATE AND SOCIETY*  
Wong-Parodi, G., Feygina, I.  
2018; 10 (4): 747–68
- **Effect of Risk and Protective Decision Aids on Flood Preparation in Vulnerable Communities** *WEATHER CLIMATE AND SOCIETY*  
Wong-Parodi, G., Fischhoff, B., Strauss, B.  
2018; 10 (3): 401–17
- **Framing clean energy campaigns to promote civic engagement among parents** *ENVIRONMENTAL RESEARCH LETTERS*  
Hanus, N., Wong-Parodi, G., Hoyos, L., Rauch, A.  
2018; 13 (3)
- **The role of psychology and social influences in energy efficiency adoption** *ENERGY EFFICIENCY*  
Hanus, N., Wong-Parodi, G., Small, M. J., Grossmann, I.  
2018; 11 (2): 371–91
- **Change in Public Concern and Responsive Behaviors Toward Air Pollution Under the Dome.** *Risk analysis : an official publication of the Society for Risk Analysis*  
Qin, C., Xu, J., Wong-Parodi, G., Xue, L.  
2018
- **Public Understanding of Ebola Risks: Mastering an Unfamiliar Threat** *RISK ANALYSIS*  
Fischhoff, B., Wong-Parodi, G., Garfin, D., Holman, E., Silver, R.  
2018; 38 (1): 71–83
- **Effect of Using an Indoor Air Quality Sensor on Perceptions of and Behaviors Toward Air Pollution (Pittsburgh Empowerment Library Study): Online Survey and Interviews.** *JMIR mHealth and uHealth*  
Wong-Parodi, G., Dias, M. B., Taylor, M.  
2018; 6 (3): e48
- **Preparing for local adaptation: a study of community understanding and support** *CLIMATIC CHANGE*  
Wong-Parodi, G., Klima, K.  
2017; 145 (3-4): 413–29
- **Informing Public Perceptions About Climate Change: A 'Mental Models' Approach** *SCIENCE AND ENGINEERING ETHICS*  
Wong-Parodi, G., de Bruin, W.  
2017; 23 (5): 1369–86
- **Behind the Carbon Curtain The Energy Industry, Political Censorship, and Free Speech (Book Review)** *SCIENCE*  
Book Review Authored by: Wong-Parodi, G.  
2017; 356 (6336): 385
- **Development and Testing of the MyHealthyPregnancy App: A Behavioral Decision Research-Based Tool for Assessing and Communicating Pregnancy Risk** *JMIR MHEALTH AND UHEALTH*  
Krishnamurti, T., Davis, A. L., Wong-Parodi, G., Fischhoff, B., Sadovsky, Y., Simhan, H. N.  
2017; 5 (4): e42
- **Plans and Prospects for Coastal Flooding in Four Communities Affected by Sandy** *WEATHER CLIMATE AND SOCIETY*  
Wong-Parodi, G., Fischhoff, B., Strauss, B.  
2017; 9 (2): 183–200
- **Public awareness and perception of environmental, health and safety risks to electricity generation: an explorative interview study in Switzerland/13669877.2017.1391320** *Journal of Risk Research*  
Volken, S., Wong-Parodi, G., Trutvenyte, E.  
2017: 1-16
- **Perceptions of electricity-use communications: effects of information, format, and individual differences** *JOURNAL OF RISK RESEARCH*  
Canfield, C., de Bruin, W., Wong-Parodi, G.  
2017; 20 (9): 1132–53

- **Fact and Fiction in Global Energy Policy 15 Contentious Questions (Book Review)** *SCIENCE*  
Book Review Authored by: Wong-Parodi, G.  
2016; 353 (6303): 997
- **A decision science approach for integrating social science in climate and energy solutions** *NATURE CLIMATE CHANGE*  
Wong-Parodi, G., Krishnamurti, T., Davis, A., Schwartz, D., Fischhoff, B.  
2016; 6 (6): 563–69
- **Stakeholder perceptions of water systems and hydro-climate information in Guanacaste, Costa Rica** *Earth Perspectives*  
Babcock, M., Wong-Parodi, G., Small, M., Grossmann, I.  
2016; 3 (3)
- **Eliciting public concerns about an emerging energy technology: The case of unconventional shale gas development in the United States** *ENERGY RESEARCH & SOCIAL SCIENCE*  
Israel, A. L., Wong-Parodi, G., Webler, T., Stern, P. C.  
2015; 8: 139–50
- **Energy development and Native Americans: Values and beliefs about energy from the Navajo Nation** *ENERGY RESEARCH & SOCIAL SCIENCE*  
Necifer, L., Wong-Parodi, G., Jaramillo, P., Small, M. J.  
2015; 7: 1–11
- **The impacts of political cues and practical information on climate change decisions** *ENVIRONMENTAL RESEARCH LETTERS*  
Wong-Parodi, G., Fischhoff, B.  
2015; 10 (3)
- **Leveraging Pittsburgh's Energy Efficiency Social Network to Predict Next Adopters**  
Hanus, N., Small, M., Wong-Parodi, G., Grossmann, I., Pei, J., Silvestri, F., Tang, J.  
*ASSOC COMPUTING MACHINERY*.2015: 920–21
- **Resilience vs. Adaptation: Framing and action** *CLIMATE RISK MANAGEMENT*  
Wong-Parodi, G., Fischhoff, B., Strauss, B.  
2015; 10: 1–7
- **A method to evaluate the usability of interactive climate change impact decision aids** *CLIMATIC CHANGE*  
Wong-Parodi, G., Fischhoff, B., Strauss, B.  
2014; 126 (3-4): 485–93
- **Team science for science communication** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Wong-Parodi, G., Strauss, B. H.  
2014; 111: 13658–63
- **Risks and risk governance in unconventional shale gas development.** *Environmental science & technology*  
Small, M. J., Stern, P. C., Bomberg, E., Christopherson, S. M., Goldstein, B. D., Israel, A. L., Jackson, R. B., Krupnick, A., Mauter, M. S., Nash, J., North, D. W., Olmstead, S. M., Prakash, et al  
2014; 48 (15): 8289–8297
- **The Role of Initial Affective Impressions in Responses to Educational Communications: The Case of Carbon Capture and Sequestration (CCS)** *JOURNAL OF EXPERIMENTAL PSYCHOLOGY-APPLIED*  
de Bruin, W., Wong-Parodi, G.  
2014; 20 (2): 126–35
- **Public perceptions of local flood risk and the role of climate change** *Environment Systems and Decisions*  
Bruine de Bruin, W., Wong-Parodi, G., Morgan, G.  
2014; 34 (4)
- **Effects of simplifying outreach materials for energy conservation programs that target low-income consumers** *ENERGY POLICY*  
Wong-Parodi, G., de Bruin, W., Canfield, C.  
2013; 62: 1157–64
- **Creating an in-home display: Experimental evidence and guidelines for design** *APPLIED ENERGY*

- Krishnamurti, T., Davis, A. L., Wong-Parodi, G., Wang, J., Canfield, C.  
2013; 108: 448–58
- **Influencing Attitudes toward Carbon Capture and Sequestration: A Social Marketing Approach** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*  
Wong-Parodi, G., Dowlatabadi, H., McDaniels, T., Ray, I.  
2011; 45 (16): 6743–51
  - **Economics of residential gas furnaces and water heaters in US new construction market** *ENERGY EFFICIENCY*  
Lekov, A. B., Franco, V. H., Wong-Parodi, G., McMahon, J. E., Chan, P.  
2010; 3 (3): 203–22
  - **Community perceptions of carbon sequestration: insights from California** *ENVIRONMENTAL RESEARCH LETTERS*  
Wong-Parodi, G., Ray, I.  
2009; 4 (3)
  - **The Role of Social Factors in Shaping Public Perceptions of CCS: Results of Multi-State Focus Group Interviews in the US**  
Bradbury, J., Ray, I., Peterson, T., Wade, S., Wong-Parodi, G., Feldpausch, A., Gale, J., Herzog, H., Braitsch, J.  
ELSEVIER SCIENCE BV.2009: 4665–72
  - **Environmental non-government organizations' perceptions of geologic sequestration** *ENVIRONMENTAL RESEARCH LETTERS*  
Wong-Parodi, G., Ray, I., Farrell, A. E.  
2008; 3 (2)
  - **Comparing price forecast accuracy of natural gas models and futures markets** *ENERGY POLICY*  
Wong-Parodi, G., Dale, L., Lekov, A.  
2006; 34 (18): 4115–22